AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-2. (Canceled)
- 3. (Currently Amended) A virtual local area network (VLAN) data switching method using an address resolution protocol (ARP) packet, comprising the steps of:

making a source host broadcast an ARP request packet;

making a Proxy ARP server prepare to transmit a virtual ARP request packet in accordance with the ARP request packet received from the source host; and

making a destination host transmit an ARP response packet directly to the source host through a switching unit upon the destination host receiving the virtual ARP request packet from the proxy ARP server, wherein a port moving sensor function of the switching unit is disabled so that the source host is not misinterpreted as being connected to a port to which the Proxy ARP server belongs.

4. (Original) The method of claim 3, wherein the virtual ARP request packet is transmitted with an internet protocol (IP) address and media access control (MAC) address of the source host included therein.

Reply to Office Action dated November 3, 2005

- 5. (Canceled)
- 6. (Currently Amended) The method of claim 3, wherein the ARP response packet is transmitted directly to the destination source host so and such that the destination host includes its own internet protocol (IP) address and its own media access control (MAC) address in response to the virtual ARP request packet.
- 7. (Currently Amended) The method of claim 3, wherein the step of making a source host broadcast an ARP request packet <u>further comprising includes</u> a step of storing a media access control (MAC) address of the source host in a media access control (MAC) table.
- 8. (Currently Amended) The method of claim 3, wherein the step of making a destination host transmit an ARP response packet further comprising includes the steps of:

making the source-host transmit the ARP response packet;

storing a media access control (MAC) address of the destination host in a media access control (MAC) table; and

transmitting the ARP response packet to the <u>destination</u>-<u>source</u> host <u>in direct</u> through the switching unit.

Reply to Office Action dated November 3, 2005

- 9. (Original) The method of claim 3, wherein the method further comprises a step of the source and destination hosts directly exchanging data packets using a MAC address stored in a MAC table.
- 10. (Currently Amended) A virtual local area network (VLAN) data switching method using an address resolution protocol (ARP) packet, comprising the steps of:

making a source host broadcast an ARP request packet;

storing a MAC address of the source host in a MAC table;

making a Proxy ARP server prepare to transmit a virtual ARP request packet in accordance with the ARP request packet received from the source host;

making a destination host transmit an ARP response packet directly to the source host upon the destination host receiving the virtual ARP request packet from the proxy ARP server;

storing a MAC address of the destination host in the MAC table; and making the source host transmit data directly to the destination host using the MAC address of the destination host, wherein a port moving sensor function of a switch is disabled so that the source host is not misinterpreted as being connected to a port to which the Proxy ARP server belongs.

Serial No. 10/024,309 Reply to Office Action dated November 3, 2005

Docket No. P-0322

11. (Original) The method of claim 10, wherein the virtual ARP request packet is transmitted with an internet protocol (IP) address and a media access control (MAC) address of the source host included therein.

12. (Canceled)

13. (Currently Amended) The method of claim [[3]] 10, wherein the ARP response packet is transmitted directly to the destination source host so and such that the destination host includes its own internet protocol (IP) address and its own media access control (MAC) address in response to the virtual ARP request packet.